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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,429	12/22/2000	Aaron G. Filler	144841-200100	2094

7590 01/20/2004

Antoinette F. Konski
McCutchen, Doyle, Brown & Enersen, LLP
Three Embarcadero Center
Suite 1800
San Francisco, CA 94111

EXAMINER	
CHEUNG, MARY DA ZHI WANG	
ART UNIT	PAPER NUMBER
3621	

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/746,429	FILLER, AARON G.	
	Examiner	Art Unit	
	Mary Cheung	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-90* is/are pending in the application.

4a) Of the above claim(s) *1-63* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *64-90* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *3,6,9* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Status of the Claims

1. This action is in response to the reply filed on October 27, 2003. Claims 1-90 are pending. Applicant has elected claims 64-90 with traverse for examination. Claims 1-63 are nonelected group, and thus are withdrawn from consideration.

Response to Arguments

2. Applicant's arguments filed October 27, 2003 have been fully considered but they are not persuasive.

In response to applicant's argument that the restriction is not reasonable, examiner has separated the claims into two groups, and given summarized descriptions for distinguishing each group along with its distinct class/subclass. Since each group has to be individually searched and rejected, it is an indeed burden on the examiner. Thus, it is believed the restriction is reasonable and proper.

Oath/Declaration

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

> The oath or declaration is defective because the Combined Declaration and Power of Attorney states "I believe I am the original, first and joint inventors...", but there is only one inventor indicated in this declaration.

Specification

4. The disclosure is objected to because of the following informalities: on page 7 line 26, the number "3012" should be "312". Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 64-68 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 64-68 merely claim a data structure (i.e. a patient medical record) comprising the plurality of features. According to MPEP 2106 IV B 1 (a), data structures are not claimed as embodied in computer-readable media are not statutory because they are not capable of causing functional change in the computer. See *Warmerdam*, 31 USPQ2d 1754. In present case, the data structure (i.e. the patient medical record) is not embodied in computer readable media, and there are no computer executable codes to perform the claimed features, such as placing a clickable image over the patient image. Applicant is advised to embody the data structure in a computer-readable media, and to embody computer executable codes in the computer-readable media to perform the claimed features.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 77-82, 86-87 and 90 are rejected under 35 U.S.C. 102(e) as being anticipated by Wood et al., U. S. Patent 5,851,186.

As to claim 77, Wood teaches a method for gathering patient data comprising (abstract):

a) Providing patient measuring equipment (abstract and column 2 line 65 – column 3 line 12 and Fig. 1; *specifically, "measuring equipment" correspond to ultrasound system in Wood's teaching*);

b) Establishing a web-based camera focused in the proximity of said patient measuring equipment whereby the position of a patient is within said camera's field of view (column 2 line 63 – column 3 line 12 and column 11 lines 54-67; *specifically, the web-based camera corresponds to the ultrasound probe in Wood's teaching*);

c) Establishing a web-based monitor positioned remotely from said patient measuring equipment and connected to said web-based camera through an web-based connection (column 2 lines 63-65 and column 3 lines 34-42 and column 11 lines 54-67 and Fig. 1; *specifically, "a web-based monitor" corresponds to item 108 of Fig. 1*);

d) Establishing a communication path from said remotely positioned web-based monitor to the area in which the patient measuring equipment is located whereby a physician can direct the manner in which the patient measuring is being conducted (column 2 lines 63-65 and column 3 lines 34-42 and column 11 lines 54-67 and Fig. 1).

As to claim 78, Wood teaches wherein said patient measuring comprises patient imaging (column 2 line 65 – column 3 line 12 and Fig. 5).

As to claim 79, Wood teaches a web-based communication link between the measuring equipment and the web-based monitor whereby said physician can further monitor the measurements being conducted (column 11 line 54 – column 12 line 32).

As to claim 80, Wood teaches a method of composing a computer-based patient medical record comprising (abstract):

a) Entering information about a patient in a database to create an initial computer-based patient record (column 3 lines 14-20 and Fig. 1; *specifically, "an initial computer-based patient record" corresponds to the diagnostic report in Wood's teaching*);

b) Associating web-based programming commands with at least portions of said initial computer-based patient record to create an enhanced computer-based patient record (column 9 lines 54-67 and Figs. 4-5).

As to claim 81, Wood teaches the step of addition graphical patient information to said initial computer-based patient record and further associating web-based programming commands with at least portions of said graphical patient information (column 9 lines 54-60 and Figs 4-5; *specifically, the graphical patient information corresponds to the ultrasound image in Wood's teaching*).

As to claim 82, Wood teaches said graphical patient information is a diagnostic image of some aspect of the patient's anatomy (column 9 lines 54-67 and Figs. 5-6).

As to claim 86, Wood teaches wherein a referring physician creates said initial computer-based patient record (column 3 lines 14-20 and column 11 lines 59-63 and Fig. 1; *specifically, "a referring physician corresponds to the user to prepare diagnostic report in Wood's teaching*).

As to claim 87, Wood teaches wherein a diagnostic imaging source provides a diagnostic image of some aspect of the patient's anatomy (column 9 lines 54-67 and Figs. 5-6).

As to claim 90, Wood teaches said web-based programming commands are hyperlinks to said at least portions of said initial computer-based patient record and wherein said hyperlinks provide further information about the linked portions of said patient records (column 3 lines 21-32 and column 4 lines 51-64 and column 9 line 54 – column 10 lines 12 and Figs. 4-7).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 83-85 and 88-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood et al., U. S. Patent 5,851,186 in view of Qian et al., U. S. Patent 6,070,167.

As to claim 83, Wood teaches wherein said web-based programming commands are hyperlinks associated with said diagnostic image (column 9 lines 54-60 and column 10 lines 13-44). Wood does not specifically teach said web-based programming

commands are hyperlinks associated with certain areas within said diagnostic image. However, Qian teaches a web-based programming commands are hyperlinks associated with certain areas within an image (column 5 lines 10-13 and column 7 lines 54-58 and Fig. 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow hyperlinks in Qian's teaching to be associated with certain areas within the diagnostic image because this would allow the user to easily find, link, and manipulate desired information related to the diagnostic image.

As to claims 84-85, Wood teaches circle, draw on, or point to specific feature of said diagnostic image. Wood does not explicitly teach adding graphical images to said diagnostic image, and where said web-based programming commands are hyperlinks associated with said graphical images. However, Qian teaches adding graphical images to another image, and a web-based programming commands are hyperlinks associated with the graphical image (column 8 lines 2-18 and Figs. 2-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow Wood's teaching to include the feature of adding graphical images to the diagnostic image, and where the web-based programming commands are hyperlinks associated with said graphical images because this would allow the user to easily find, link, and manipulate desired information related to the diagnostic image.

As to claim 88, Wood teaches a reading physician add said diagnostic image to said initial computer-based patient record (see claims 81-82 above; specifically, "a read physician" corresponds to the user described in column 9 lines 54-59), Wood further teaches circle, draw on, or point to specific feature of said diagnostic image. Wood

does not specifically teach adding graphical images to said diagnostic image. However, Qian teaches adding graphical images to another image (column 8 lines 2-18 and Figs. 2-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow Wood's teaching to include the feature of adding graphical images to the diagnostic image because this would allow the user to easily find, link, and manipulate desired information related to the diagnostic image.

As to claim 89, Wood teaches a technician adds web-based programming commands which are associated with said diagnostic image (column 3 lines 21-32 and column 4 lines 51-64 and column 9 line 54 – column 10 lines 12 and Figs. 4-7).

11. Claims 64-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qian et al., U. S. Patent 6,070,167 in view of Scott et al., U. S. Patent 6,468,212.

As to claim 64, Qian teaches a computer-based record comprising:

a) A digitally encoded image (column 2 lines 37-40 and Fig. 3);

b) At least one clickable image map placed over said image (column 8 lines 11-18 and Fig. 3; *specifically, the clickable image map corresponds to item 62 of Fig. 3*);

c) Additional information linked to said clickable image map, whereby selection of said clickable image map by a user of said computer-based record retrieves said additional information (column 8 lines 11-18 and Fig. 3; *specifically the additional information correspond to item 66 of Fig. 3*).

Qian does not specifically teach the computer-based record is a computer-based patient medical record and the digitally encoded image is a digitally encoded patient

image. However, Scott teaches manipulating a computer-based patient record comprising a digitally encoded patient image (abstract and Figs. 17-21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the computer-based record in Qian's teaching to be a computer-based patient medical record and the digitally encoded image to be a digitally encoded patient image because this would expand the usage environments of Qian and attract more users to use Qian' teaching.

As to claim 65, Qian teaches the computer-based record comprises at least one graphical symbol superimposed on said digitally encoded image (column 3 lines 15-22, 50-65 and column 8 lines 11-18 and Fig. 3). As to claim 66, Qian further teaches said graphical symbol is stored digitally within said digitally encoded image (column 11 lines 32-34). As to claim 67, Qian further teaches said graphical symbol is stored as an overlay in a separate file associated with said digitally encoded image (column 3 lines 52-59 and column 11 lines 35-37). As to claims 65-67, Qian does not specifically teach the computer-based record is a computer-based patient medical record and the digitally encoded image is a digitally encoded patient image. However, Scott teaches the computer-based medical record comprises at least one graphical symbol superimposed on said digitally encoded patient medical image (abstract and Figs. 17, 19, 21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the computer-based record in Qian's teaching to be a computer-based patient medical record and the digitally encoded image to be a digitally encoded patient image

because this would expand the usage environments of Qian and attract more users to use Qian' teaching.

As to claim 68, Qian further teaches said additional information is stored in alternative sets and wherein data from one of said alternative sets is provided to said user according to the user selection (column 8 lines 2-18 and Figs. 3-4).

As to claim 69, Qian teaches a computer-based user interface for accessing a computer-based record having a digitally encoded image, at least one clickable image map placed over said image, and additional information linked to said clickable image map, said computer-based user interface comprising (column 2 lines 37-40 and column 8 lines 11-18 and Fig. 3; *specifically, the clickable image map corresponds to item 62 of Fig. 3, and the additional information correspond to item 66 of Fig. 3*):

a) A computer screen for display of said computer-based record (column 3 lines 46-51 and Figs. 2-3);

b) A user input whereby a user can access said additional information linked to said clickable image map (column 3 lines 53-67 and column 8 lines 11-18);

c) A control form whereby said user can select the format or content of said additional information which said user accesses through said link to said clickable image map (column 3 lines 53-67 and column 8 lines 11-18 and Figs. 2-3; *specifically, "a control form" corresponds to items 48, 50, 52, 54 of Fig. 2 and item 66 of Fig. 3*).

Qian does not specifically teach the computer-based record is a computer-based patient medical record and the digitally encoded image is a digitally encoded patient

image. However, Scott teaches manipulating a computer-based patient record comprising a digitally encoded patient image (abstract and Figs. 17-21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the computer-based record in Qian's teaching to be a computer-based patient medical record and the digitally encoded image to be a digitally encoded patient image because this would expand the usage environments of Qian and attract more users to use Qian' teaching.

As to claim 70, Qian teaches said user input is a computer pointing device (column 3 lines 57-59). Qian does not explicitly teach said computer pointing device is a computer mouse controlling a cursor's movement on said computer screen. However, Scott teaches this matter (column 5 lines 4-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the computer pointing device in Qian's teaching to be a computer mouse for fast and easily selecting a desired object.

As to claim 71, Qian teaches said control form is a pop-up menu accessed by clicking on said clickable image map (column 3 lines 57-67 and Figs. 2-3).

As to claim 72, Qian teaches said user input is a computer pointing device, a pen or a speech recognition device (column 2 line 62 – column 3 line 9 and column 3 lines 57-59). Qian does not explicitly teach said computer pointing device is selected from the group of input mechanisms consisting of: mouse, trackball, touch tablet, sterile touch tablet; light pointer, optical three dimensional pointing system, ultrasonic three dimensional pointing system, and retinal position sensing. However, these input

mechanisms are widely used. It would have been obvious to one of ordinary skill in the art to allow the computer pointing device in Qian's teaching to include variety types of devices such as mouse, trackball, etc., and to further allow the user input device in Qian's teaching to include retinal position sensing for fast and easily selecting a desired object.

As to claim 73, Qian teaches providing HTML actions initiated by passing selecting said clickable image map (column 7 lines 54-61 and Fig. 2).

As to claim 74, Qian teaches said HTML actions are selected from the group consisting of: displaying additional information about the portion of the digitally encoded image associated with said clickable image map; highlighting said portion of the digitally encoded image associated with said clickable image map; driving a floating box associated with on-screen cursor; triggering animations; causing a new window to open on said computer screen; and bringing up a pop-up menu which presents further options to the user (column 3 line 50 – column 4 line 4 and column 5 lines 5-12 and column 7 lines 38-61 and Figs. 2-3). Qian does not specifically teach the digitally encoded image is a digitally encoded patient image. However, Scott teaches manipulating a digitally encoded patient image (abstract and Figs. 17-21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the digitally encoded image in Qian's teaching to be a digitally encoded patient image because this would expand the usage environments of Qian and attract more users to use Qian' teaching.

As to claim 75, Qian teaches HTML selection features for activating broadly-applicable functions (column 7 lines 54-61 and Fig. 2).

As to claim 76, Qian teaches said broadly-applicable functions are selected from the group consisting of: an internal word-search capability; an external web-search capability; a record site map; and user help information (column 4 lines 5-25 and column 8 lines 20-26 and Fig. 2). Qian does not specifically teach the record site map is a live medical record site map. However, Scott teaches this matter (column 11 lines 59-64 and column 14 lines 15-30 and Figs. 20-21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the record site map in Qian's teaching to be a live medical record site map because this would expand the usage environments of Qian and attract more users to use Qian' teaching.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hilton et al. (U. S. Patent 5,452,416) discloses organizing, presenting, and manipulating medical images.

Beitel (U. S. Patent 5,905,508) discloses dynamically plotting an element on an image using a table.

Moukheibir (U. S. Patent 6,021,404) discloses diagnosis of any described medical condition or event.

Aden (U. S. Patent 6,273,857) discloses storing and managing dimensional measurement values and the underlying ultrasound images utilize a report generator.

Alleckson et al. (U. S. Patent 6,336,900) discloses reporting a patient's health parameter to a remote data management center.

Yoshimura et al. (JP 2002224045 A) discloses comparing, retrieving, and displaying image information when acquired image information from various medical image information preserved as digital data.

Inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Cheung whose telephone number is (703)-305-0084. The examiner can normally be reached on Monday – Thursday from 8:00 AM to 5:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached on (703) 305-9768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

The fax phone number for the organization where this application or proceedings is assigned are as follows:

(703) 872-9306 (Official Communications; including After Final Communications labeled "BOX AF")

(703) 746-5619 (Draft Communications)

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, 7th Floor Receptionist.

Mary Cheung
Patent Examiner
Art Unit 3621
January 8, 2004